

**REMARKS**

Applicants have carefully considered the Office Action dated December 10, 2004 regarding the above-identified application, and the amendments above together with the remarks that follow are presented in a bona fide effort to respond thereto and address all issues raised in that Action. Several claims have been cancelled to reduce issues. Independent claim 1 has been amended and claim 2 has been recast in independent form, to distinguish over the art applied in the Action. Several dependent claims have been amended for clarity or to conform more closely to the revised independent claims. Care has been taken to avoid introduction of any new subject matter. Claims 1, 2, 7, 8, 10, 11, 19 and 20 are pending and should all be in condition for allowance. Prompt favorable reconsideration is requested.

The Action included an objection to the specification on the ground that the title was not descriptive. In response, Applicants have replaced the title with "Anti-Glare Device for Projector." It is respectfully submitted that the new title is adequately descriptive, therefore, the objection to the specification should be withdrawn.

The Action included a rejection of original claims 1-4, 7-12 and 20 under 35 U.S.C. §102(b) as anticipated by Japanese publication JP 2000-305481 to Hiramatsu. Claims 5, 6 and 13-19 then were rejected under 35 U.S.C. §103 as unpatentable over the Japanese Hiramatsu document in view of U.S. Patent Number 6,829,394 to Hiramatsu. It is respectfully submitted that independent claims 1 and 2, as amended above, are novel over the Japanese Hiramatsu document and patentably distinguish over the combination of the two Hiramatsu documents. Hence, pending claims 1, 2, 7, 8, 10, 11, 19 and 20 should be patentable over the documents applied in the art rejections. A more detailed explanation of the basis of patentability follows.

The Japanese Hiramatsu document (JP 2000-305841) discloses a camera 2 for capturing a display area, and the system obtains a captured image information in the lower part 20 along the

bottom of the display area shown in Fig. 4. In the lower part 20, the brightness level of a person area is lower than the brightness level of non-person area. In this Japanese Hiramatsu document, the person area is detected horizontally, based on the difference between the brightness level of the person area and the brightness level of the non-person area. However, the position of the person area is detected only in the horizontal direction. The Japanese document, for example, does not disclose detection of a person area in the vertical direction. Thus, in this Japanese Hiramatsu document, all areas corresponding in the vertical direction to (generally above) the detected horizontal position of the person are displayed in low brightness level (shaded rectangles 6 and 23 in Fig. 3 and 4). Hence, the system disclosed the Japanese Hiramatsu document reduces brightness in a vertical rectangular region; it does not display only the area that substantially corresponds to the person in the image, at the low brightness level. For example, it does not reduce brightness of only a mask or silhouette closely conforming to the detected shape of the person.

Moreover, the Japanese Hiramatsu document does not consider a degree of correspondence in an image projected on a screen, against which enlarging processing, trapezoidal-distortion correction processing and the like were performed. Hence, it is impossible to define in high accuracy an area corresponding to the person, on an image produced on a picture display device, which should be displayed in low brightness level.

To provide higher accuracy, the devices of claims 1 and 2 both comprise “a detector which detects an area projected on a screen” and “an image size controller which changes, based on detection results from said detector, the captured image from said camera into a predetermined image size.” The comparator in the extractor uses the captured image, the size of which is changed by the size controller. The control of the picture display device, to modify the appropriate area of the resulting image, uses the person area extracted as a result of the

comparison. The claimed detector and size controller elements are not disclosed in Hiramatsu's Japanese document.

As described in page 3 of Detailed Action, the rejection interprets drawing reference sign "17" of the Japanese document so as to allegedly correspond to an "image size controller." This interpretation is inaccurate. The translation supplied by the Examiner clearly shows that the drawing reference sign "17" in the Hiramatsu Japanese document is only a controller of brightness. As described in the paragraph numbered 0028 in the translation, a picture input signal 18 which signifies an original displayed image, is processed to reduce brightness in a brightness adjusting area obtained by a decision part 16. Brightness of the adjusting area is changed into for example, black level. The paragraph further states that the picture light brightness adjuster (controller) 17 reduces only the brightness level of a specified area. There is no suggestion that a function of controller 17 relates to changing the size of an image size captured by the camera. Furthermore, the specified area described above corresponds to all areas in the vertical direction above the area in horizontal direction in which a person was detected.

Generally, a real displayed image from a projector is an image against which enlarging processing, trapezoidal-distortion correction processing or the like has been performed. Hence, if the person area is detected from a capture of the displayed image, the correspondence of the person to a position on a picture display device becomes uncertain. This creates a strong possibility of making a mistake in specifying the area on any image display device in which low brightness level should be output and thus missing the desired anti-glare effect. A device as recited in either claim 1 or claim 2 establishes a relationship between the display area projected on a screen and the display area on a picture display device, by means of the "detector" and the "image size controller" described above and by providing responsive area extraction and display device control of the area in which there should be a modified output (low brightness level). In

this processing, the modified display area is decided by “a comparator which compares a signal of said captured image the size of which is changed by said image size controller with the image signal input to said display device controller” (refer Fig. 3) as defined in amended claim 1 or “a comparator which compares a signal of said captured image the size of which is changed by said image size controller with an image signal controlled by said display device controller” (refer Fig. 3) as defined in amended claim 2. As a result, as mentioned above either claimed apparatus has a remarkable effect that enables an accurate detection of a person area in a projected image e.g. for close conformance to the shape of the person in horizontal and vertical directions even when enlarging processing, trapezoidal-distortion correction processing or the like were performed.

The Japanese Hiramatsu document does not disclose the claimed detector and size controller. The system in that document also does not meet the comparison requirement of either independent claim, e.g. in that it does not use a captured image which has been changed in size. Hence, the Japanese Hiramatsu document does not satisfy all of the limitations of either independent claim 1 or independent claim 2. It is respectfully submitted that those claims are novel and the anticipation rejection thereof should be withdrawn.

The Examiner cited the US Hiramatsu document only for secondary teachings to use an infrared camera and a comparison of the average values between pixels. The claims relating to those secondary features (5, 6 and 13-19) have been cancelled. Addition of such features to the basic device disclosed in the Japanese Hiramatsu document would still not satisfy all of the requirements of claim 1 or of claim 2. For example, there would still be no detector which detects an area projected on the screen or an image size controller which changes size of the captured image from the camera based on results from the detector, that is to say based on the

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detected projected area. Hence, claims 1 and 2, as well as dependent claims 7, 8, 10, 11, 19 and 20, patentably distinguish over the proposed combination of the two Hiramatsu documents.

For the reasons explained above, it is believed that all of the pending claims should be in condition for allowance. Accordingly, this case should now be ready to pass to issue; and Applicants respectfully request a prompt favorable reconsideration of this matter.

It is believed that this response addresses all issues raised in the December 10, 2004 Office Action. However, if any further issue should arise that may be addressed in an interview or an Examiner's amendment, it is requested that the Examiner telephone Applicants' representative at the number shown below.

To the extent necessary, if any, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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